

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the Patent Application of

Marco Stura et al.

Serial No.: 09/898,962

Filed: July 3, 2001

For: DEVICE FOR ELECTRICALLY
POWERING ELECTRICAL
MEMBERS POSITIONED ON A
REFRIGERATOR DOOR

Group Art Unit: 3677

Examiner: Mah, Chuck Y.

APPEAL BRIEF

Mail Stop AF
Commissioner for Patents
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Sir:

This is an Appeal Brief pursuant to 37 C.F.R. § 41.37 in support of Applicants' appeal of the Final Rejection of the Examiner, mailed August 18, 2006, of claims 14-26. Each of the topics required by 37 C.F.R. § 41.37 is presented herewith and is labeled appropriately.

I. REAL PARTY IN INTEREST

Whirlpool Corporation, having offices in Benton Harbor, Michigan ("Whirlpool") is the real party in interest of the present application. An assignment of all rights in the parent application for the present application to Whirlpool was executed by the inventors and recorded in the U.S. Patent and Trademark Office at Reel 011991, Frame 0085.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to the present application of which Appellants, Appellants' legal representatives, or Assignee are aware.

III. STATUS OF CLAIMS

The application has 26 claims, which are presented in the Appendix. Claims 1-13 have been cancelled and claims 14-26 are currently pending. Of the pending claims, claims 14-25 have been twice rejected by the Examiner and claim 26 has been rejected once by the Examiner. Accordingly, the Appellants hereby appeal the final rejection of claims 14-26.

IV. STATUS OF AMENDMENTS

Subsequent to the final Office Action dated August 18, 2006, no amendments have been made to the claims.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1¹ calls for a refrigerator comprising a cabinet 1 defining at least one food preservation compartment and having a first conductor 6 configured to connect to a source of electricity and a door 2 for selectively closing the cabinet 1, the door 2 having at least a second conductor 5

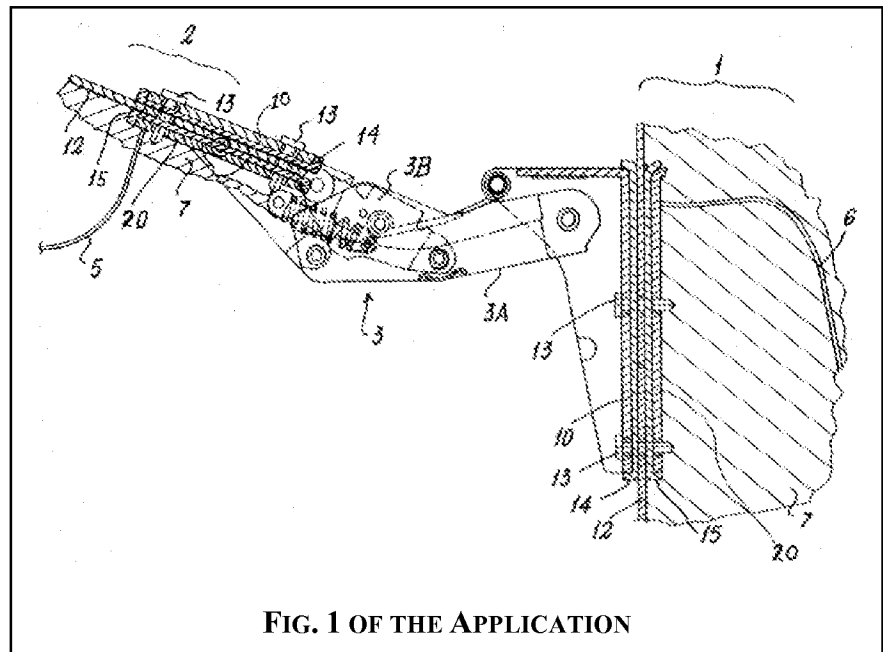
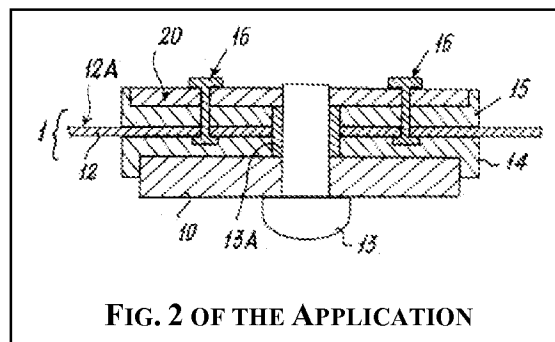


FIG. 1 OF THE APPLICATION

¹ 37 CFR §41.37(c)(1)(v) requires reference to the specification by page and line number. The Application was filed without line numbers, but included paragraph numbers. Thus, references are given by page number, paragraph number, and the line number of the referenced paragraph.

configured to supply power to at least one user device provided on the door **2**. *Application*, p. 2, ¶ [0010], ln. 1-2; p. 3, ¶ [0011], ln. 1-3, and ¶ [0012], ln. 1-4. An electrical connection device couples the first and second conductors **5**, **6** and comprises a hinge **3** connecting the cabinet **1** to the door **2**. *Id.*, p. 2, ¶ [0010], ln. 2-3; p. 3, ¶ [0013], ln. 1-2. The hinge **3** comprises an electrically conductive first hinge plate **3A** mounted to the cabinet **1** and electrically coupled to the first conductor **6**, and an electrically conductive second hinge plate **3B** mounted to the door **2** and electrically coupled to the second conductor **5**. *Id.*, p. 3, ¶ [0014], ln. 1-2; p. 4, ¶ [0017], ln. 1-1-4. The first and second hinge plates **3A**, **3B** are electrically coupled to define an electrically conductive path from the first conductor **6** to the first hinge plate **3A** to the second hinge plate **3B** to the second conductor **5** to supply power from the source of electricity to the user device. *Id.*, p. 4, ¶ [0017], ln. 1-1-4.



VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. In the Office Action of August 18, 2006, the Examiner rejected claims 14-17, 24 and 26 under 35 U.S.C 103 (a) as allegedly being unpatentable over U.S. Patent No. 3,089,202 to Pulaski ("Pulaski") in view of U.S. Patent No. 3,103,398 to Phelps ("Phelps"). Appellants disagree with the Examiner's assertion that Pulaski and Phelps render claims 14-17, 24 and 26 obvious to one skilled in the art.

B. In the Office Action of August 18, 2006, the Examiner rejected claims 18-20 and 25 under 35 U.S.C 103 (a) as allegedly being unpatentable over Pulaski and Phelps, and further in view of U.S. Patent No. 2,778,000 to Mills ("Mills"). Appellants disagree with the Examiner's assertion that Pulaski, Phelps, and Mills render claims 18-20 and 25 obvious to one skilled in the art.

C. In the Office Action of August 18, 2006, the Examiner rejected claims 21-23 under 35 U.S.C 103 (a) as allegedly being unpatentable over Pulaski and Phelps, and further in

view of U.S. Patent No. 3,955,044 to Hoffman ("Hoffman"). Appellants disagree with the Examiner's assertion that Pulaski, Phelps, and Hoffman render claims 21-23 obvious to one skilled in the art.

VII. ARGUMENTS

A. Claims 14-17, 24 and 26 are not obvious over the alleged combination of Pulaski and Phelps.

1. The combination of Pulaski and Phelps is improper, thereby negating the basis for the rejection of claims 14-17, 24 and 26.

The combination of Pulaski and Phelps fails to meet the rules for making the combination. The applicable rules for combining prior art references are:

A claimed invention is unpatentable if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art....The ultimate determination of whether an invention would have been obvious under 35 U.S.C. §103(a) is **a legal conclusion based on underlying findings of fact.**²

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field....Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

Most if not all inventions arise from a combination of old elements....Thus, every element of a claimed invention may often be found in the prior art....However, **identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention**....Rather, to

² The underlying factual inquiries include (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; and (3) the differences between the claimed invention and the prior art. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966).

establish obviousness based on a combination of the elements disclosed in the prior art, **there must be some motivation, suggestion or teaching of the desirability of making the specific combination** that was made by the applicant....Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved....In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references....The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art....Whether the Patent Office Examiner relies on an express or an implicit showing, **the Examiner must provide particular findings related thereto....Broad conclusory statements standing alone are not "evidence."**

In Re Werner Kotzab, 217 F.3d 1365; 55 U.S.P.Q.2d (BNA) 1313 (Fed. Cir. 2000)(citations omitted)(emphasis added).

Therefore, to combine the references, there must be some motivation, suggestion or teaching in Pulaski and Phelps regarding the desirability to make the combination of Pulaski and Phelps. An identification of elements claimed is insufficient without the corresponding motivation, suggestion or teaching. The motivation, suggestion, and teaching must be explicitly or implicitly found in Pulaski and Phelps, which the Examiner must provided as particular findings that cannot be broad conclusory statements standing alone.

A review of Pulaski and Phelps shows that there is no such motivation, suggestion or teaching and the Examiner's findings are merely broad conclusory statements standing alone.

Pulaski discloses a foam-insulated door (2) hingedly mounted to a refrigerator cabinet (1) by a pin-and-cup type hinge comprising a bracket (14) secured to the cabinet (1) by screws (16), the bracket (14) including a horizontally extending arm (17) for supporting the door (2). A pin (19) is secured to the arm (17) and is received within an opening defined by a cup or sleeve (21)

in the door (2) to allow the door (2) to pivot relative to the pin (19). The sleeve (21) and pin (19) have cooperating hollow interiors that define a passageway between the door (2) and cabinet (1). Electrical conductors (23) in the form of two insulated wires extend through the passageway to provide electrical power from the cabinet (1) to a butter conditioning compartment (5) in the door (2). Within the door (2), the conductors 23 extend through a hollow thimble (26) that fits over the sleeve (21) and has a pair of openings (30) which snugly receive the conductors (23). The ends of the conductors (23) that emerge out of the thimble (26) are embedded in foam insulation 11. The height of the thimble (26) is such that the length of the conductors 23 passing through the thimble (26) is sufficient to absorb the twisting action resulting from opening and closing the door (2) *Pulaski, col. 2, ln. 53-60 and ln. 67-71.*

Phelps discloses leaf or hinge-plate type hinge connecting the doors (18) to a cabinet (10) for storing stereo equipment. The hinge connection will be described with respect to one of the hinges on one of the doors (18) for the sake of simplicity; it is understood that each door has two hinge connections that are the same. The hinge comprises top and bottom leaves (36, 37), which are rotatably connected by a pin (51). A nylon washer (48) electrically isolates the

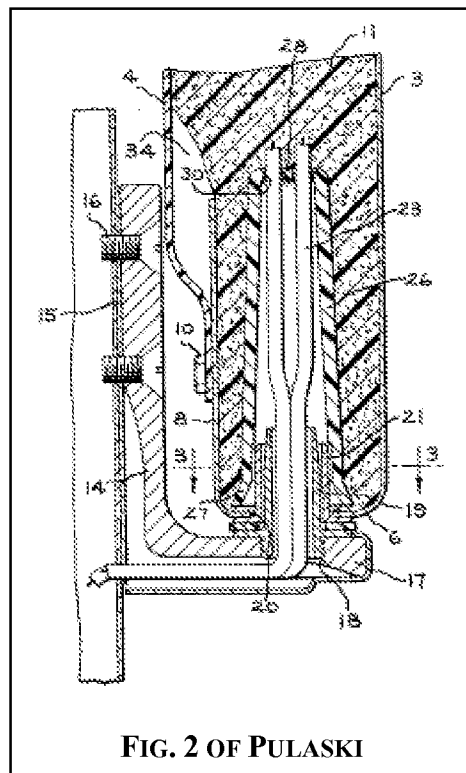
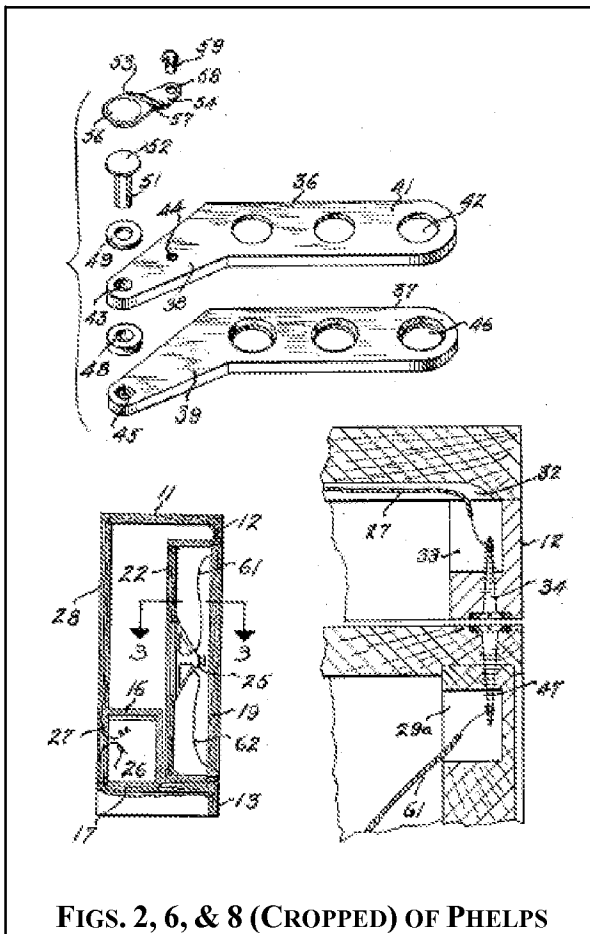


FIG. 2 OF PULASKI



FIGS. 2, 6, & 8 (CROPPED) OF PHELPS

leaves (36, 37) from one another and a second nylon washer (49) electrically isolates the top hinge leaf (36) from the pin (51). Screws (34, 47) mount the leaves (36, 37) to the cabinet (10) and door (18). An electrical connection is established through the leaves (36, 37) by peening the pin (51) into a non-circular opening (45) and attaching a cap (53) to the upper leaf (36). The cap (53) includes a cup (56) that is biased onto the head (52) of the pin (51). Thus, the leaf (36) is electrically coupled to the leaf (37) through the cap (53) and the pin (51). That electrical connection is used to electrically couple a speaker (25) located in the door (18) to an amplifier (16) located in the cabinet (10). A conductor wire (61) extends between the speaker and the screw (47) mounting the bottom hinge leaf (37) to the door (18). Another conductor wire (27) extends between the screw (34) mounting the top hinge leaf (36) to the cabinet (10) and the amplifier (16).

a. Pulaski teaches away from making the combination.

“There is no suggestion to combine, however, if a reference teaches away from its combination with another source.” *Tec Air v. Denso*, 192 F.3d, 1353, 1360 (Fed. Cir. 1999). Pulaski teaches away from the combination with Phelps asserted by the Examiner. One of the motivations established in Pulaski is to provide a foam insulated door including “an electrical hinge designed to provide a limited or twisting action of the conductors after the introduction and solidification of the foam insulation.” *Pulaski, col. 1, ln. 56-60*. This is accomplished by passing the conductor wires (23) through a non-conductive hollow hinge and employing the thimble (26) that covers a length of the conductor wires (23) at the point they enter the door. The thimble (26) prevents foam insulation injected into the door from solidifying around that length of the conductor wires (23). The length of conductor wires (23) covered by the thimble (26) is sufficient to absorb the twisting action resulting from opening and closing the door relative to the cabinet. Pulaski thus teaches providing a controlled twisting and flexing of the conductor wires (23) passing through a hollow hinge, where the degree of twisting and flexing is determined by the length of the thimble (26). Phelps specifically teaches attaching conductor wires (27, 61) to screws (34, 47) that mount the hinge leaves (36, 37) to the cabinet and door so that no wires are

inserted through the hinge, and are thereby “protected against wear or damage” that can otherwise be caused by passing wires directly from the cabinet to the door *Phelps*, col. 4, ln. 50-51; col. 1, ln. 30-57. These two concepts cannot be reconciled with one another, and therefore the combination of Pulaski and Phelps is improper and fails accordingly.

b. The combination would change the operating principle of Pulaski.

As stated in § 2143.01 of the MPEP, “If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” The MPEP cites *In re Ratti*, 270 F.2d 810 (CCPA 1959) in support of this statement. In *Ratti*, the Court reversed a rejection based on a combination of references, wherein the primary reference teaches a rigid seal with a sheet metal reinforcing member and the secondary references teaches a gasket with resilient spring fingers. The rejection suggested replacing the reinforcing member with the resilient spring fingers, but the Court held “that the combination of [the references] is not a proper ground for rejection of the claims here on appeal. This suggested combination of references would require a *substantial reconstruction and redesign of the elements shown in [the primary reference]* as well as a *change in the basic principles under which the [primary reference] construction was designed to operate.*” *In re Ratti*, at 813 (emphasis added).

Pulaski operates on the principle of conductor wires extending through an internal passage of a hollow hinge pin mounted to a one-piece hinge bracket, where the hinge and hinge bracket form no part of the electrical conduction path. Phelps operates on the principle of a wireless hinge, where conductor wires are attached to screws that mount two hinge leaves to a door and cabinet. To replace the wired hinge of Pulaski with the wireless hinge of Phelps would destroy the wired principle of Pulaski and moreover would not just require a *substantial reconstruction* of the elements shown in Pulaski, but it would require a complete reconstruction of the hinge taught by Pulaski. Therefore, the combination cannot be sustained because it changes the operating principle of Pulaski.

2. *Assuming that the combination of Pulaski and Phelps is proper, the combination still does not reach the claims.*

Group A: Claims 14-17, 24 and 26

Assuming, *arguendo*, that the combination of Pulaski and Phelps was proper, the combination still would not reach Applicants' invention. Claims 15-17, 24 and 26 depend directly or indirectly from claim 14 and thus arguments made with respect to claim 14 apply to claims 15-17, 24 and 26. The rejection of claims 15-17, 24 and 26 will initially be addressed with respect to claim 14.

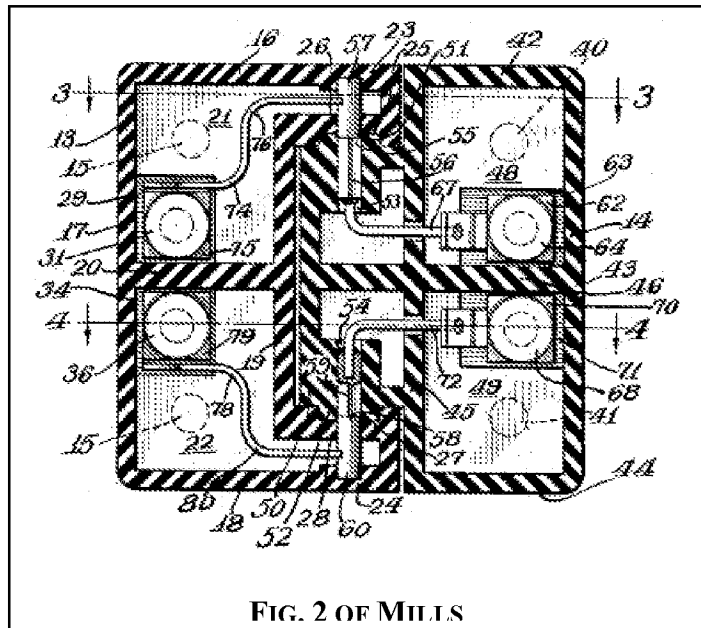
As previously described, the Examiner's combination of the references is not proper. Applicants' contemplate only two ways in which the asserted references can be combined. In the first, the combination would result in modifying the hinge of Phelps by forming a passageway through the hinge pin and pulling the conductor wires through the passageway, as taught by Pulaski. In the second, the combination would result in modifying the hinge of Pulaski by attaching the conductor wires to the screw, hinge pin, or another portion of the L-shaped hinge bracket. Claim 14 calls for a refrigerator to having an electrical connection device comprising a hinge having first and second hinge plates, where the plates are electrically coupled to define an electrically conductive path from a first conductor to the first hinge plate to the second hinge plate to a second conductor to supply power from a source of electricity to a user device provided on the door of the refrigerator. Both contemplated combinations of Pulaski and Phelps fail to teach a conductive path as called for by claim 14, namely by first and second conductors electrically and respectively coupled to first and second hinge plates. As the combination lacks an express element of claim 14, claim 14 is patentable over the combination.

Claims 15-17, 24 and 26 depend directly or indirectly from claim 14 and are likewise not obvious and patentable over the alleged combination of Pulaski and Phelps.

B. Claims 18-20 and 25 are not obvious in view of the alleged combination of Pulaski, Phelps, and Mills.

1. The combination of Pulaski, Phelps and Mills is improper, thereby negating the basis for the rejection of claims 18-20 and 25.

Mills discloses a hinge (12), which houses conductive elements that route electrical current from a refrigerator cabinet (10) to a refrigerator door (11). The hinge (12) comprises two portions, a hinge butt (13) and a hinge leaf (14), that are constructed from an electrical insulating material, rendering the hinge (12) incapable of conducting electricity. The hinge butt (13) and hinge leaf (14) mount to the cabinet (10) and door (11), respectively, by bolts (30, 35, 64, 68).



Electrical current is routed through the hinge butt and leaf, from bolts (30, 35) of the hinge butt (13) to bolts (64, 68) of the hinge leaf (14), by electrically conductive elements coupled between the hinge butt bolts (30, 35) and hinge leaf bolts (64, 68). These electrically conductive elements include resilient members (74, 78), pins (55, 58), and conductors (67, 72) that extend through the hinge (12).

To combine the references, there must be some motivation, suggestion, or teaching in Pulaski, Phelps, and Mills as to the desirability of making the combination. As described above, there is no motivation, suggestion or teaching to make the underlying combination of Pulaski and Phelps. The addition of Mills to the underlying combination does not remedy the errors with the underlying combination. Therefore, the combination of Pulaski, Phelps, and Mills is improper for the same reasons as the underlying combination.

Furthermore, even if the underlying alleged combination of Pulaski and Phelps is tenable,

there is no motivation, suggestion or teaching to add Mills to the underlying alleged combination. The Examiner suggests that it would have been obvious to one of ordinary skill in the art to modify the hinge of Pulaski and Phelps with insulating members as taught by Mills to isolate the conductive hinge parts from the door and the cabinet to prevent a short circuit and dissipation of electricity. However, the electrical conductors (23) taught by Pulaski are insulated wires and Phelps provides nylon washers (48, 49) between the hinge leaves (36, 37) and the hinge pin (51) and thus neither Pulaski or Phelps would not require additional insulation. Therefore, the motivation alleged by the Examiner does not exist and the combination is improper, rendering the claims allowable.

2. *Assuming that the combination of Pulaski, Phelps and Mills is proper, the combination still does not reach the claims.*

Group B: Claims 14, 18-20 and 25

Assuming, *arguendo*, that the combination of Pulaski, Phelps, and Mills was proper, the combination still would not reach Applicants' invention. While the rejection is specifically related to claims 18-20 and 25, claim 14 will also be addressed as claims 18-20 and 25 are dependent, directly or indirectly, on claim 14. Thus, the grounds of rejection pertaining to claims 18-20 and 25 will be addressed with respect to claim 14.

The combination of Pulaski, Phelps and Mills does not render the claim obvious, as Mills does not remedy the shortcomings of the underlying combination of Pulaski and Phelps, outlined in **(1b)** of this paper with respect to claim 14. There is no teaching or suggestion in Mills of an electrically conductive path defined through the hinge plates, which is the element lacking in the two contemplated combinations of Pulaski and Phelps. Therefore, claim 14 is patentable over the combination of Pulaski, Phelps, and Mills. Claims 18-20 and 25 are also patentable based on their direct or indirect dependency on claim 14.

C. Claims 21-23 are not obvious in view of the alleged combination of Pulaski, Phelps, and Hoffman.

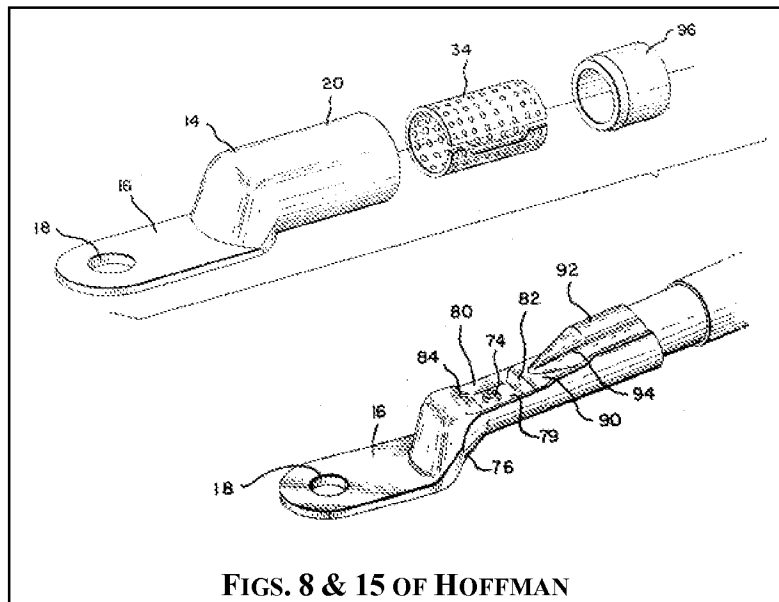
1. The combination of Pulaski, Phelps and Hoffman is improper, thereby negating the basis for the rejection of claims 21-23.

Hoffman discloses a corrosion-proof terminal for crimping onto an aluminum wire (48). The terminal (14) is tubular, with the wire (48) extending through the hollow portion of the terminal (14). Electrical contact is established between the terminal (14) and the wire (48) by a crimp portion (79) that is pressed into the terminal (14) using a crimping die. The terminal (14) is closed at a forward portion (28) and is sealed at a rearward portion by a bushing (96) to provide protection from harsh environments by eliminating electrolytic corrosion *Hoffman, abstract.*

To combine the references, there must be some motivation, suggestion, or teaching in Pulaski, Phelps, and Hoffman as to the desirability of making the combination. As discoursed above, there is no motivation, suggestion or teaching to make the underlying combination of Pulaski and Phelps. The addition of Hoffman does not remedy the

errors of the underlying combination. Therefore, the combination of Pulaski, Phelps, and Hoffman is not proper for the same reasons as the underlying combination.

Furthermore, for the following reasons, even if the underlying combination of Pulaski and Phelps is tenable, there is no motivation, suggestion or teaching to add Hoffman to the underlying alleged combination.



a. Hoffman is non-analogous art.

Hoffman and the Applicants' claimed invention are only similar in that they both have electrically conductive elements. This single similarity is not sufficient for Hoffman to be analogous art. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). The Applicants' claimed invention relates to a refrigerator having a compartment closed by a door in which a user device is located and an electrical connection for supplying power to the user device. In contrast, Hoffman relates to a corrosion-proof terminal that is crimped onto a solid or stranded aluminum wire. Refrigerators and terminals for aluminum wire are completely different fields of endeavor. Moreover, Hoffman and the Applicants' claimed invention address different problems. Hoffman is directed to the problem of preventing a number of issues associated with copper-aluminum terminations, such as oxidation, creep, and electrolytic corrosion. The Applicants' invention addresses the problem of providing simple and correct electrical connection of a user device positioned on a refrigerator door, while also enabling the door mounting direction to be easily reversed. Therefore, since Hoffman is not in the same field of endeavor and is pertinent to a different problem than with which the Applicants' invention is concerned, Hoffman is non-analogous art.

In the Advisory Action dated October 12, 2006, the Examiner erroneously states that Hoffman is analogous art because it clearly solves the electrolytic corrosion problem in the wire connection. There is no suggestion or teaching in Pulaski or Phelps that electrolytic corrosion is a problem in their respective wire connections. Therefore, Hoffman is non-analogous art, and the combination of Pulaski and Phelps with Hoffman is improper.

b. "Electrolytic corrosion" benefit not applicable to Pulaski or Phelps.

The Examiner identifies a single element in Hoffmann (terminal 14, which the Examiner has termed a "reinforcement element") and states that it would have been obvious to a person of

ordinary skill in the art to modify the wire of Pulaski and Phelps with a reinforcement element connected to the wire as taught by Hoffman to *eliminate electrolytic corrosion*. This is a generalized statement that simply points to one of the benefits of Hoffman as a reason for combining the patents. However, examination of the Pulaski and Phelps patents reveals that there is no need to eliminate electrolytic corrosion by utilizing a feature from Hoffman. Electrolytic corrosion is a problem when two metals having electrical potentials that differ significantly are exposed to moisture containing an electrolyte, which establishes a galvanic cell *Hoffman, col. 1, ln. 53-56*. There is no suggestion or teaching in Pulaski or Phelps that electrolytic corrosion is a problem in the refrigerator art, nor is there any motivation, suggestion, or teaching to seek to eliminate such corrosion.

2. *Assuming that the combination of Pulaski, Phelps, and Hoffman is improper, the combination still does not reach the claims.*

Group C: Claims 14 and 21-23

Assuming, *arguendo*, that the combination of Pulaski, Phelps, and Hoffman was proper, the combination still would not reach Applicants' invention. While the rejection is specifically related to claims 21-23, claim 14 will also be addressed as claims 21-23 indirectly depend from claim 14. Thus, the grounds of rejection pertaining to claims 21-23 will be addressed with respect to claim 14.

The combination of Pulaski, Phelps, and Hoffman does not render claim obvious since Hoffman does not remedy the shortcomings of the underlying combination of Pulaski and Phelps outlined in **(1b)** of this paper with respect to claim 14. There is no teaching or suggestion in Hoffman of an electrically conductive path defined by conductors attached to hinge plates, which is the element lacking in the two contemplated combinations of Pulaski and Phelps. Therefore, claim 14 is patentable over the combination of Pulaski, Phelps, and Hoffman. Claims 21-23 are patentable based on their direct or indirect dependency on claim 14.

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CONCLUSION

In view of the foregoing, it is submitted that the rejection of claims 14-26 is improper and should not be sustained. Therefore, a reversal of the rejections of claims 14-26 is respectfully requested.

Respectfully submitted,

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Date: December 12, 2006

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VIII. CLAIMS APPENDIX

1-13. (Canceled)

14. (Previously Presented) A refrigerator comprising:

a cabinet defining at least one food preservation compartment and having at least a first conductor configured to connect to a source of electricity;

a door for selectively closing the cabinet and having at least a second conductor configured to supply power to at least one user device provided on the door; and

an electrical connection device coupling the first and second conductors and comprising a hinge connecting the cabinet to the door and the hinge comprising an electrically conductive first hinge plate mounted to the cabinet and electrically coupled to the first conductor, an electrically conductive second hinge plate mounted to the door and electrically coupled to the second conductor, wherein the first and second hinge plates are electrically coupled to define an electrically conductive path from the first conductor to the first hinge plate to the second hinge plate to the second conductor to supply power from the source of electricity to the user device.

15. (Previously Presented) The refrigerator according to claim 14, wherein the electrical connection device further comprises first and second electrically conductive fasteners, the first electrically conductive fastener mounting the first hinge plate to the cabinet and electrically coupled to the first conductor, and the second electrically conductive fastener mounting the second hinge plate to the door and electrically coupled to the second conductor.

16. (Previously Presented) The refrigerator according to claim 15, wherein the first and second electrical fasteners pass through an outer panel of the cabinet and door, respectively, and into an interior of the cabinet and door, respectively, to mount the first and second hinge plates to the cabinet and the door, respectively.

17. (Previously Presented) The refrigerator according to claim 16, wherein the first and second conductors are located in the interior of the cabinet and the door, respectively.

18. (Previously Presented) The refrigerator according to claim 17, wherein the first and second electrically conductive fasteners are electrically insulated from the cabinet and door.

19. (Previously Presented) The refrigerator according to claim 18, and further comprising a first electrically insulating bushing positioned between the first electrically conductive fastener and the outer panel of the cabinet and a second electrically insulating bushing positioned between the second electrically conductive fastener and the outer panel of the door.

20. (Previously Presented) The refrigerator according to claim 19, and further comprising a first electrically insulating member positioned between the first hinge plate and the cabinet and a second electrically insulating member positioned between the second hinge plate and the door to electrically insulate the first and second hinge plates relative to the cabinet and the door.

21. (Previously Presented) The refrigerator according to claim 15, wherein the electrical connection device further comprises first and second electrically conductive reinforcement elements, the first electrically conductive reinforcement element electrically coupled to the first electrically conductive fastener, and the second electrically conductive reinforcement element electrically coupled to the second electrically conductive fastener.

22. (Previously Presented) The refrigerator according to claim 21, wherein the first and second reinforcement elements are electrically insulated from the cabinet and door, respectively.

23. (Previously Presented) The refrigerator according to claims 22, and further comprising a first electrically insulating member positioned between the first reinforcement

element and the cabinet and a second electrically insulating member positioned between the second reinforcement element and the door.

24. (Previously Presented) The refrigerator according to claim 14, wherein the first and second conductors are embedded in insulating material of the cabinet and door, respectively.

25. (Previously Presented) The refrigerator according to claim 14, wherein the first and second hinge plates are electrically insulated from the cabinet and the door, respectively.

26.(Previously Presented) The refrigerator according to claim 14, and further comprising a hinge pin electrically connecting the first hinge plate and the second hinge plate.

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IX. EVIDENCE APPENDIX

No evidence has been entered by the Examiner or Appellants into the record.

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X. RELATED PROCEEDINGS APPENDIX

There being no decision rendered by a court or the Board in any related proceeding, none is listed here.